567—112.28(455B) Specific requirements for a sanitary landfill proposing to accept no solid waste other than municipal sewage sludge.

112.28(1) *Plan requirements.* The plans for sanitary landfills proposing to accept only sewage sludge shall include information required by rules 112.2(455B) through 112.13(455B), 112.27(455B), 112.29(455B), and 112.30(455B) and subrule 112.26(1) and the following:

a. The source of the sludge, a description of the process(es) which produce the sludge and a description of the sources and characteristics of the treatment plant influent.

b. Detailed analysis of the sludge to be disposed of at the site including:

(1) Total residue;

(2) Volatile residue;

(3) pH;

(4) Total nitrogen;[1]

(5) Ammonia nitrogen (NH_3-N);[1]

(6) Nitrate-nitrogen (NO_3-N);[1]

(7) Total phosphorous;[1]

(8) Potassium;[1]

(9) The following metals[1]: arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), molybdenum (Mo), nickel (Ni), selenium (Se), and zinc (Zn); and

(10) Such other tests as are determined by the department to be necessary to establish the constituents and stability of the sludge.

The collection and preservation of samples shall be done by the highest grade operator at the plant producing the sludge, or the operator's designee. The collection and preservation of samples shall be done in a manner and frequency approved by the director and intended to ensure that the sampling results are representative of the sludge being disposed.

Analyses shall be performed at a laboratory approved by the state hygienic laboratory. All analyses shall be performed in accordance with the methods described in "Methods for Chemical Analysis of Water and Wastes," 1974 (U.S. EPA) or "Standard Methods for the Examination of Water and Waste Water," 14th Edition, 1976. Alternate methods may be substituted only if acceptable to the state hygienic laboratory and approved by the department.

c. The detailed description of the disposal process required in subrule 112.13(6) shall include:

(1) Method of operation;

(2) Daily and annual loading of the sludge and the significant components of the sludge as identified in the analyses of 112.28(1)*"b"*; and

(3) Times of use (including durations and frequencies).

d. Information indicating how the operating requirements of rule 112.29(455B) and subrules 112.26(2) and 112.28(2) shall be met.

e. Engineering plans and reports detailing how the site will be designed, constructed, and operated to protect groundwater and surface water resources.

f. Proof of the applicant's ownership of the site or legal entitlement to use the site for the disposal of solid waste for the term of the permit for which application is made.

g. Such other information as is required by the director to determine the adequacy of the applicant's plan.

112.28(2) *Operating requirements.* Sanitary landfills accepting only sewage sludge shall be operated in conformance with rules 112.2(455B) through 112.13(455B), 112.27(455B), 112.29(455B), and 112.30(455B), subrule 112.26(2), and this subrule. Compliance with the surface disposal provision of federal regulations at 40 CFR Part 503, Subpart C, as adopted on February 19, 1993, is also required. The plan submitted shall detail how the sanitary landfill will comply with these requirements.

a. Sludge at the site shall be covered after each day of operation with a layer of at least 1 foot of earth. In no event shall sludge be exposed for more than 24 hours.

b. At least 2 feet of intermediate cover of earth shall be applied to any area of the site which will not be utilized for further disposal of sludge for more than one week. The cover shall be graded to allow surface water runoff without creating erosion or pollution problems.

c. The final cover shall be consistent with the proposed land use, but in no event shall it be less than 2 feet.

d. Analyses of the sludge shall be performed and submitted to the department on a stipulated schedule and shall include such tests as required to confirm the constituents of the sludge.

[1] on a dry weight basis